

**California Regional Water Quality Control Board
Central Valley Region**

**Irrigated Lands Conditional Waiver Program
Technical Issues Committee
21 June 2005
DRAFT MEETING NOTES**

MEETING ATTENDEES: Dr. Karl Longley, Board Member – CVRWQCB; CVRWQCB, Bill Croyle, RWQCB; Don Weston, UCB; Mike Johnson, UC Davis; Dawn Carlton, Kings River Conservation District; Julie Anne Langill, CVWRQCB; Brian Finlayson, CDFG; Lenwood Hall, University of Maryland; Bill McKinney, ESVWQC; Stephen Clark, Pacific EcoRisk; Joe McGahan, Westside SJR Watershed Coalition; Bill Thomas, So. San Joaquin WQC; Marshall Lee, CDPR; Matt Reeve, CDFA; G. Fred Lee, G. Fred Lee & Associates; Matt Reeve, CDFA; Parry Klassen, East SJ WQC; Wendy Cohen, RWQCB; Diana Messina, RWQCB; Margie Lopez Read, RWQCB; Robert Holmes, RWQCB; Jay Rowan, RWQCB; RWQCB; Amanda Smith, RWQCB; Karen Larsen, RWQCB; John Swanson, CVRWQCB; Emily Alejandrino, CVWRQCB; Stephanie Fong, CVRWQCB; Devra Lewis, CVRWQCB; Chad Dibble, CVRWQCB

I. ANNOUNCEMENTS

Following introductions, various announcements were made, including the reminder that the Joint Board Meeting (SWRCB and CVRWQCB) would be held on June 23rd at the CalEPA Building.

An announcement regarding an Endocrine Disruptor Study that is being conducted by the CVRWQCB SWAMP staff was made and the study design was made available by Robert Holmes. Specific schedule and monitoring sites were provided by Robert Holmes following the meeting and are attached to these meeting minutes.

A draft list of TIC Focus Group members was also routed for confirmation purposes. Many changes were suggested both during and after the meeting, and a more complete and accurate list of members has since been developed. Please do notify Margie Lopez Read if changes need to be made to the Focus Group lists.

A Schedule for future TIC meetings and topics was also developed, with August 16th being the next TIC meeting date for discussion of Basin Plan Objectives (Jon Marshack) and a presentation regarding laboratory MDLs, PQLs, LOQs and the significance of each (John Swanson). A revised TIC meeting schedule is also attached (Please note the proposed switch in meeting dates from October 4th to September 27).

II. SEDIMENT TOXICITY FOCUS GROUP

Dr. Don Weston gave a presentation on the findings of sediment toxicity utilizing data from various projects, including CalFED, and the monitoring that was done specifically for the CVRWQCB Irrigated Lands Conditional Waiver Program (including ongoing Phase II monitoring). It was remarkable to note that although the various studies did vary with respect to study design, they all tended to show approximately the same percentage of toxicity in sample results. A copy of the Power Point presentation made by Don Weston is also available on request.

The Focus Group also discussed the recommendation to the TIC regarding eliminating the requirement for the Growth end Point on the Sediment Toxicity testing. The TIC unanimously approved the

recommendation to be considered in the waiver extension. There was also discussion regarding the frequency that should be required for sediment toxicity monitoring, especially during storm events, although no consensus was reached.

There was also a discussion regarding appropriate chemistry follow-up for sediment toxicity results. There are acknowledged limitations with commercial laboratory capabilities in pyrethroids, for example, making any such requirements impractical at this current time. However, it is felt that by next irrigation season commercial laboratories should be able to come to some level of competence in sediment pesticide testing. It was recommended that the group organize a meeting with different commercial laboratories (tentatively August 31) to present the upcoming needs of the program.

III. OTHER FOCUS GROUP ACTIVITIES

Karen Larsen provided a brief update of the Toxicity Trigger Group's activities. At the last TIC meeting, the Toxicity Trigger Group presented their recommendation for when a TIE should be conducted. The recommendation included a trigger for conducting Toxicity Identification Evaluations (TIEs) on samples showing toxicity to the algae and the types of manipulations that would be appropriate for algae TIEs. Karen distributed materials describing the algae TIE manipulations. At their July meeting, the Toxicity Trigger Group will begin triggers for follow-up actions such as re-sampling and other weight of evidence investigations.

The Nutrients Focus Group has been unable to hold their kick-off meeting, but that will be scheduled in the near future. There is a tentative date of October 4 (or September 27) for the main TIC meeting to discuss progress/findings from the Nutrients Focus Group. Dr. G. Fred Lee did provide a summary of issues that will need to be considered when evaluating the significance of nutrient concentrations. That summary will be discussed at the first meeting when it is scheduled.

IV. CLOSING DISCUSSION AND NEXT STEPS

In follow-up to the June TIC meeting, Focus Groups will continue to meet and develop recommendations regarding sediment toxicity follow-up, water column toxicity follow-up, and initiation of the Nutrient Focus Group meetings. A tentative date of August 31 was also set for a meeting with laboratories to discuss needed improvements in capabilities for sediment toxicity and sediment pesticide analyses.

Investigation into Estrogenic Endocrine Disrupting Substances in Ambient Waters of the Central Valley

The Surface Water Ambient Monitoring Program (SWAMP) is supporting development of an estrogenic endocrine disrupting chemical (EEDC) assay that can be used to screen surface waters for the presence and effects of endocrine disrupting chemicals. A copy of the study plan (August 2003) was passed out at the June 2005 Ag Waiver TIC meeting. CVRWQCB Sacramento River Watershed staff is working with UC Davis, US EPA Cincinnati, US EPA Region 9, and staff from the North Coast RWQCB to develop the assay procedures. EEDC's are compounds that mimic or interfere with the reproductive function of estrogen, can have variable effects on fish, ranging from behavioral changes to feminization of males. The current focus of the SWAMP endocrine disrupter assay work includes development and application of an economical short-exposure method capable of detecting low concentrations (5 – 10 ng/L) of EEDCs in ambient surface waters. The procedure involves exposing larval rainbow trout (*Oncorhynchus mykiss*) to water samples and analyzing their livers for vitellogenin mRNA (Vg). The project is currently conducting initial screening level assessments on select ambient waterways in Central Valley and North Coast Regions. The ambient water assessments will take place through September 2005. The focus of the method development includes testing of receiving waters from municipal wastewater treatment plants, agricultural dominated, and urban dominated waterways throughout the Central Valley. A draft final report is expected December 30, 2005. Staff will present a preliminary review of findings at the Ag Waiver TIC meeting in October, 2005. The sampling schedule for the Central Valley is listed in Table 1. Table 1 (below) replaces Table 6 and Table 7 in the Study Plan.

Table 1. Sampling schedule for investigation into estrogenic endocrine disrupting substances in ambient waters of the Central Valley.

Sample Dates	Site Description	County
12-Jul-05	Hospital Creek @ River Rd.	Stanislaus
	MID Main Drain @ Shoemaker Rd.	Stanislaus
	TID @ Carpenter Rd.	Stanislaus
	Los Banos Creek @ Hwy 140	Merced
	Orestimba Creek @ River Rd.	Stanislaus
	Del Puerto Creek @ Vineyard Rd.	Stanislaus
	French Camp Slough @ Airport	San Joaquin
26-Jul-05	San Joaquin River @ Lost Lake Park	Fresno
	Buena Vista Slough @ Tule Lake Reserve	Kern
	Kings River @ Jackson Ave (near HWY 198)	Kings
	Kaweah River @ Hwy 65	Tulare
	City of Visalia – Mill Creek	Tulare
	Hume Lake Campground	Tulare
	Elk Bayou @ Avenue 200	Tulare

09-Aug-05	Dry Creek @ Cook Riolo Rd	Placer
	Old Alamo Creek @ Easterly WWTP Discharge	Solano
	Colusa Basin Drain @ Knights Landing	Colusa
	Sycamore Slough @ Hwy 45	Colusa
	Putah Creek @ UCD Discharge	Yolo
	Miner's Ravine @ Dick Cook Rd	Placer
30-Aug-05	Bunch Creek @ Iowa Hills Rd	Placer
	Pleasant Grove Creek @ Pettigrew	Placer
	Steelhead Creek @ Discovery Park	Sacramento
	Arcade Creek @ Norwood Ave	Sacramento
	Deer Creek @ Latrobe Rd	El Dorado
	Wadsworth Canal @ Acacia Rd.	Sutter
	Sacramento Slough @ HWY 113	Sutter
13-Sep-05	Sacramento River @ Delta	Shasta
	Sacramento River below Keswick Reservoir	Shasta
	Butte Creek @ Durham/Dayton HWY	Butte
	Sacramento River @ Freeport	Sacramento
	Battle Creek @ Gover Rd.	Tehama
	Cottonwood Creek @ Balls Ferry Rd.	Shasta
	Yuba River @ Marysville	Yuba